



# THE SOURCE



NEWSLETTER OF THE NHDES DRINKING WATER SOURCE PROTECTION PROGRAM  
ON THE WEB AT [WWW.DES.STATE.NH.US/DWSPP](http://WWW.DES.STATE.NH.US/DWSPP)

SPRING 2003

## Putting Your Assessment Reports To Work For You

*This article is the first in a series that will focus on using the Drinking Water Source Assessment Report results to identify protection measures.*

What is a planning board to do with the stack of Drinking Water Source Assessment Reports it has received over the past three years? What is a water supplier expected to do with *its* Assessment Reports? DES is answering these questions with a new fact sheet that shows how each vulnerability ranking points to particular protection approaches. *Protecting Public Drinking Water Sources Based on Source Assessment Reports* (DES fact sheet WD-WSEB-12-8) released in March 2003, describes typical protection approaches to address a medium or high vulnerability ranking in each of the 13 categories of contamination threats used in the assessments.

The four-page fact sheet was distributed to planning boards, along with a summary of all Assessment Report results for each respective town, in March. Included in the mailing was a

letter from DES urging planning boards to work with water suppliers and other interested groups in the community and to call on the Drinking Water Source Assessment Program for help in developing local protection programs.

A small excerpt from the fact sheet's table is shown below. The complete fact sheet lists all 13 vulnerability ranking criteria used in the reports and includes descriptions of the protection approaches. For example, if a particular source received a medium or high vulnerability

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### Planners Invited to May 15 Drinking Water Protection Workshop

Regional Planning Commission staff, municipal planning officials, and other interested planners are invited to attend this day-long workshop featuring:

- The municipal role in preserving groundwater recharge, water use efficiency, and private well protection.
- Common approaches to drinking water source protection.
- Examples of successful protection measures.
- Information about funding opportunities.

The workshop is being held on May 15, 2003 from 9 a.m. - 4 p.m. at DES headquarters, 6 Hazen Drive, Concord. For more information or to register, contact Jessica Brock at 271-3303.

Criterion (Threat Category)	Typical Protection Approaches
Sanitary radius	Education Land acquisition Inspection program Health ordinance
Known source of contamination	Water quality monitoring
Potential sources of contamination	Education Inspection program Health ordinance Emergency response planning
Agricultural land cover	Education Inspection program Water quality monitoring Land acquisition Watershed rules (for surface sources)



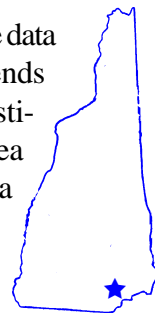
## Spotlight on ... Town of Salem

In 1974, the Safe Drinking Water Act was passed in an effort to ensure the public's health by requiring public water systems to conduct regular testing of the water they provide to customers. Believing that all residents (not just those served by a public water system), were entitled to information about the quality of their drinking water, the Town of Salem instituted a local ordinance in February 2000 that requires testing of private well water. Before a Certificate of Occupancy is given to any Salem building serviced by a new or replacement well, the water must be tested for a set of twelve water quality parameters: bacteria, chloride, sodium, iron, manganese, pH, hardness, fluoride, nitrate/nitrite, lead, arsenic, and volatile organic compounds (VOCs).

Since the program was instituted, the town has reviewed approximately 100 sets of water quality results for private wells each year. The ordinance requires that any exceedences of EPA's maximum contaminant level (MCL) standards for these twelve parameters be remediated before the Certificate of Occupancy is awarded.

Requiring the tests and remediation not only protects the residents moving into a particular building, but it could potentially protect neighbors as well because Salem has begun to catalog and map the data that is submitted. These records allow the Town to plot contaminant lev-

els across town. As more and more data is collected, any contaminant trends that begin to surface can be investigated with further testing and area residents can be notified if an area of concern is detected.



For instance, in 2002, a drinking water quality test conducted by a private Salem homeowner revealed high levels of arsenic in the water. When this result came to the attention of state officials, the Salem health officer turned to the data to determine if similar results had occurred in any neighboring areas. Further investigation undertaken by the state revealed elevated levels at additional nearby residences. Wanting to protect the health of residents, Salem officials sprang into action using local cable access to advertise an informational meeting for the neighborhood, which proved very successful in educating residents. Through continued testing and mapping of results, Salem hopes to ensure the health of residents and protection of its groundwater.

For more information about private well testing requirements in Salem, contact Health Officer Brian Lockard at 890-2050. To view the ordinance, visit [www.ci.salem.nh.us/pdf/WellTest.pdf](http://www.ci.salem.nh.us/pdf/WellTest.pdf).

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### *DWSAP Continued from pg. 1*

ranking for agricultural land cover in the source protection area (as did 84 percent of the community sources statewide), protection approaches to consider include education, a voluntary farm inspection program, water quality monitoring (either groundwater or surface water), and watershed rules (for surface sources). An area with significant agricultural land cover may also present opportunities to protect land, either through acquisition or easements. The land could then remain in agricultural use, with reasonable controls to ensure water quality protection.

To obtain a copy of the new fact sheet, call DES at 271-2975 or visit [www.des.state.nh.us/factsheets/ws/ws-12-8.htm](http://www.des.state.nh.us/factsheets/ws/ws-12-8.htm). Summary results of all drinking water source assessments can be found at [www.des.state.nh.us/dwspp/reports.htm](http://www.des.state.nh.us/dwspp/reports.htm).

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6 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
(603) 271-3503

Acting Commissioner	Robert Monaco
Division Director	Harry T. Stewart
Bureau Administrator	Anthony P. Giunta
Program Manager	Sarah Pillsbury
Editors	Nicole Clegg, Paul Susca

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## First Round of Agricultural BMP Grants Awarded for Source Protection

Five out of six community water sources received a medium or high vulnerability ranking on their Source Assessments for the amount of agricultural land in their source protection areas. Fortunately, grants are available to fund on-farm projects to reduce the risk posed by certain agricultural practices to water quality. The program awarded its first source water protection grants in December 2002. A total of \$13,431 went to six projects for agricultural best management practices involving erosion prevention, manure management, and fencing to keep animals away from waterways in drinking water source protection areas.

The Agricultural Nutrient Management Grant Program is administered by the N.H. Department of Agriculture, Markets and Food (NHDAMF) with funds from the Drinking Water Source Protection Program, DES's Nonpoint Source Program, and a state general fund appropriation to NHDAMF. The December grants were the first to use drinking water protection funds. Grants for non-drinking water projects, both on-farm and statewide, amounted to an additional \$17,782.

The projects receiving grants, with a maximum amount of \$2,500 each, were chosen by a committee of agricultural and non-point source pollution experts including the Drinking Water Source Protection Program. The application process is designed to be simple, and farmers can get help preparing applications from their county conservation districts. Applications for the next round of grants are due June 1, 2003. Current funding for the two grant rounds is \$20,000 in state funds and \$55,000 in federal funds annually. Legislation (HB 598) seeking to reauthorize funding for the program is pending. Without reauthorization, the grant program will end after the June 2003 round. For more information, contact Richard Uncles at 271-3685 or [runcles@agr.state.nh.us](mailto:runcles@agr.state.nh.us), or read more and download an application at [www.des.state.nh.us/dwspp/aggrants.htm](http://www.des.state.nh.us/dwspp/aggrants.htm).



## DES and USGS Launch Joint Study on MtBE Contamination Of Wells

Contamination of surface and groundwater in New Hampshire by MtBE (methyl t-butyl ether) has been a problem since its introduction to gasoline in the 1980s. To determine the extent of MtBE contamination in New Hampshire, DES and the U.S. Geological Survey recently launched a joint 12-month study that will sample approximately 250 water supply sources (half public sources and half private sources) in Rockingham County.

The study focuses on Rockingham County because it is where the greatest potential risk of exposure to MtBE in drinking water exists and also contains the largest population of New Hampshire residents served by groundwater. Rockingham County has 310 public water suppliers, 21 percent of which have already been found to have some level of contamination. There is no similar data on the number of con-

taminated private supplies in the county, but a recent study of private wells in Salem revealed that 70 percent of those tested had some level of MtBE contamination and that 10-12 percent had a level above the state standard of 13 parts per billion.

DES and USGS hope to identify both naturally occurring and man-made factors that contribute to MtBE contamination. If such factors can be identified, steps will be taken to minimize the possibility of further contamination. Results from the study, set to be released in September 2003, will also be used to help advise policies, regulations, and management practices for the use of reformulated gasoline at the state, regional, and national levels.

For more information regarding the MtBE study, contact Fred McGarry at 271-4978 or [fmcgarry@des.state.nh.us](mailto:fmcgarry@des.state.nh.us)

## Legislative Update: Eight Groundwater Bills Being Considered by Legislature

Interest in groundwater protection and management has increased markedly in recent years due in part to drought conditions, contentious large groundwater withdrawals, and unprecedented population growth that has increased the demand for water. As we go to press with this issue of *The Source* in early March, there are eight groundwater bills being considered by the legislature (see below). Six of the bills being considered

in this session call for studies by agencies, commissions, or the legislature. Two bills, SB 155 and HB 797, call for broad study of how groundwater can be better managed and protected. Four other bills focus on specific issues including how best to account for future municipal water needs in large groundwater withdrawal permitting (SB 67), whether there should be a requirement for increased ownership of watershed land to provide

recharge for large groundwater withdrawals (HB 742), whether a fee should be charged for commercial use of groundwater (HB 540), and issues related to the effect of large groundwater withdrawals on a pond in southern New Hampshire (SB 194). In addition to these study bills, HB 401 and HB 454 call for changes to the existing large groundwater withdrawal permitting process. HB 401 proposes an additional public hearing, allowing for the formation of local review committees and changing the appeals process. HB 454 would add language on protection of existing water rights and would provide municipalities with the authority to deny a large groundwater withdrawal application.

Other source water protection related bills being considered include HB 289, which would require rain sensors on new in-ground irrigation systems, SB 64, which calls for an update of the State's Drought Management Plan, and SB 162, which establishes a legislative committee to study water resources.

The status of these bills and the dates of hearings and work sessions can be obtained by going to the New Hampshire Legislature's Quick Bill Status Search page at [www.gencourt.state.nh.us/ie/billstatus/quickbill.html](http://www.gencourt.state.nh.us/ie/billstatus/quickbill.html) and entering the bill number.

Bill #	Bill Title
SB 67	An act relative to a report on municipal water needs
SB 155	An act establishing a commission to study issues relative to large groundwater withdrawals
SB 194	An act establishing a committee to study certain issues relative to large groundwater withdrawals and their effect on Darrah Pond in Litchfield
HB 401	An act relative to approvals under the groundwater protection act
HB 454	An act relative to property rights and large groundwater withdrawals
HB 540	An act establishing a committee to study a fee on withdrawals of water for commercial purposes
HB 742	An act establishing a committee to study the relationship between groundwater withdrawals and the ownership of watershed lands
HB 797	An act establishing a committee to study methods for the legislature to protect New Hampshire's groundwater aquifers

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